CLAIMS

1.   A remote control method of a home network comprising:

setting a CP (Control Point) controlling devices connected to a home network system at a home agent in the home network system and at a remote CP of a remote terminal respectively; and

connecting the CP set at the home agent and the CP set at the remote CP through a specific channel.

2.   The method of claim 1, wherein the home network system is based on a UPnP (Universal Plug and Play).

3.   The method of claim 1, wherein the remote CP of the remote terminal controls devices through the home agent communicating with the devices connected to the home network system.

4.   The method of claim 2, wherein, when the remote terminal has stacks of TCP/IP and HTTP, the home agent performs a function of a SSDP (Simple Service Discovery Protocol) and a GENA (Generic Event Notification Architecture) using an IP multicast, and the remote terminal performs functions of a series of a SOAP (Simple Object Access Protocol), a GENA and a user interface which include a UPnP API   (Application   Program   Interface) function.

5.   The method of claim 2, wherein, when the remote terminal has a WAP (Wireless Application Protocol) stack, the home agent performs a function of a SSDP and a GENA using an IP multicast and a

5   WAP gateway function, and the remote terminal performs UPnP API, GENA* and SOAP* functions,

wherein the SOAP* and the GENA* are a SOAP and a GENA included in the WAP stack.

10   6.   The method of claim 5, wherein the WAP gateway function is separated from the home agent.

7.   The method of claim 5, wherein the WAP gateway function converts a SOAP* and a GENA* messages defined in WML

15   (Wireless Markup Language) version into a SOAP and a GENA messages in an existing XML (Extensible Markup Language), and includes the converted messages in a HTTP.

8.   A remote control system of a home network comprising:

20   a home network;

a home agent communicating with devices connected to the home network and having a function of a CP used at the home network; and

a remote CP set at a remote terminal and having a function of

25   the CP,

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wherein the CP of the home agent and the CP of the remote CP are connected through a specific channel.

9.   The system of claim 8, wherein the home network is
based on a UPnP (Universal Plug and Play).

10.   The system of claim 8, further comprising a user interface unit set at the remote terminal and providing an interface to a user.

11.   The system of claim 8, wherein the home agent includes a UPnP protocol processor for an IP multicast.

12.   The system of claim 8, wherein, when the remote terminal has stacks of TCP/IP and HTTP, the home agent performs a function of a SSDP (Simple Service Discovery Protocol) and a GENA (Generic Event Notification Architecture) using an IP multicast, and the remote terminal performs functions of a series of the SOAP (Simple Object Access Protocol), the GENA and the user interface, which include a UPnP API (Application Program Interface) function.

13.   The system of claim 8, wherein, when the remote terminal has a WAP (Wireless Application Protocol) stack, the home agent performs a function of a SSDP and a GENA using an IP multicast and a WAP gateway function, and the remote terminal performs UPnP API, GENA* and SOAP* functions,

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wherein the SOAP* and the GENA* are a SOAP and a GENA included in the WAP stack.

14.   The system of claim 13, wherein the WAP gateway function is separated from the home agent so as to exist at an external network.

15.   The system of claim 13, wherein the WAP gateway function converts a SOAP* and a GENA* messages defined in WML (Wireless Markup Language) version into a SOAP and a GENA messages in a XML (Extensible Markup Language), and includes the converted messages in an HTTP.

16.   A system for remotely controlling devices connected to a home network comprising:

a UPnP(Universal Plug and Play)-based home network;

a home agent communicating with devices in the home network and having a function of a UPnP CP (Control Point) used at the UPnP-based home network;

a remote CP set at the remote terminal and having a function of a UPnP CP; and

a user interface unit set at the remote terminal and providing an interface to a user,

wherein, the UPnP CP of the home agent and the UPnP CP of the remote CP are connected   through a specific channel.

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17. The system of claim 16, wherein, when the remote terminal has stacks of TCP/IP and HTTP, the home agent performs a function of a SSDP (Simple Service Discovery Protocol) and a GENA

5   (Generic Event Notification Architecture) using an IP multicast, and the remote terminal performs functions of a series of the SOAP (Simple Object Access Protocol), the GENA and the user interface including a UPnP API (Application Program Interface) function.

10   18. The system of claim 16, wherein, when the remote terminal has a WAP (Wireless Application Protocol) stack, the home agent performs a function of a SSDP and a GENA using an IP multicast and a WAP gateway function, and the remote terminal performs UPnP API, GENA* and SOAP* functions,

15   wherein the SOAP* and the GENA* are a SOAP and a GENA included in the WAP stack.

19. The system of claim 18, the WAP gateway function is separated from the home agent.

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20. The system of claim 18, the WAP gateway function converts a SOAP* and a GENA* messages defined in WML (Wireless Markup Language) version into a SOAP and a GENA messages in a XML (Extensible Markup Language), and includes the converted

25   messages in a HTTP.

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21.   In a home network system performing a remote control by using a local CP, the local CP of the home network monitors whether a remote CP is enabled, and determines whether to transfer an authority

5   for controlling UPnP devices on the basis of the monitoring result.

22.   The local CP of claim 21, further comprising a step of obtaining state information from the remote CP.

10   23.   The local CP of claim 22, further comprising a step of determining a range of an authority transfer on the basis of the received state information from the remote CP.

24.   In a home network system performing a remote control by

15   using a local CP, the local CP discovers devices connected in a local home network, stores information of the discovered devices, monitors whether a remote CP is connected to the local home network, and transmits the stored information to the remote CP on the basis of the monitoring result.

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25.   In a home network system performing a remote control by using a remote CP, the remote CP checks whether the remote CP can be connected to a local home network, connects itself to the home network on the basis of the check result, and transmits its state

25   information when it is connected   to the home network.

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26.   In a home network system performing a remote control by using a remote CP, the remote CP receives device information from a local CP and controls a device connected to the home network system

5   on the basis of the received information.

27.   The remote CP of claim 26, wherein the remote CP directly controls the device.

10   28.   The remote CP of claim 26, wherein the remote CP controls the device through the local CP.